

Abstract

Virtual Reality Relaxation for Family Caregivers of ICU Patients: Preliminary Findings on Feasibility and Acceptability

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Introduction. Admission to the intensive care unit is highly stressful for family members. This burden may lead to Post-Intensive Care Syndrome-Family (PICS-F), characterized by psychological, physical and cognitive symptoms that interest around 25–40% of caregivers. While interventions such as ICU diaries, psychological support, and family involvement have been proposed, initiatives with virtual reality (VR) for caregivers remain limited.

Methods. This pilot feasibility study evaluated the usability, acceptability and short-term effects of a VR relaxation intervention among ICU caregivers. Informal caregivers performed a 10-minute guided relaxation session using MiVr4Care®, an in-house VR application combining relaxation audio with an immersive scenario. Perceived stress (PSS-10) was collected before the session, while usability (SUS), acceptability, heart rate and respiratory rate were assessed afterwards

Result. The study is ongoing, with 16 participants enrolled out of 59. Usability and acceptability were high (SUS>68; acceptance 91%). Participants described the experience as relaxing, reporting reduced tension and brief moments of self-care.

Discussion. VR relaxation appeared feasible and well accepted among ICU caregivers, but further research is needed. If confirmed in trials, this approach may support caregiver well-being and promote the humanization of intensive care.

Keywords: Caregiver Support, Virtual Reality, Intensive Care Unit

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